

What is claimed is:

1. A piezoelectric type electric acoustic converter comprising:

a plurality of piezoelectric ceramic layers which are laminated to define a laminate;

main surface electrodes disposed on front and back main surfaces of said laminate, an internal electrode disposed between respective ceramic layers, and all of the ceramic layers are polarized in the same direction which is a thickness direction thereof;

said piezoelectric type electric acoustic converter generates bending vibration in response to application of an alternating signal between the main surface electrodes and the internal electrode; and a resin layer arranged to cover substantially all of the front and back surfaces of the laminate.

2. A piezoelectric type electric acoustic converter according to Claim 1, wherein the resin layer is a stiffened coating layer.

3. A piezoelectric type electric acoustic converter according to Claim 2, further comprising a paste resin film disposed below the stiffened resin coating layer.

4. A piezoelectric type electric acoustic converter according to Claim 1, wherein the resin layer is a resin film bonded to the laminate.

5. A piezoelectric type electric acoustic converter according to Claim 1, wherein the laminate body has a substantially rectangular shape.

6. A piezoelectric type electric acoustic converter according to Claim 1, wherein the main surface electrodes on the front and back surfaces are mutually conducted via a first side electrode disposed on a side of the laminate, and the internal electrode is conducted with a second side electrode disposed on a side of a position which is different from the first side electrode.

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7. A piezoelectric type electric acoustic converter according to Claim 6, wherein the first and second side electrodes are arranged to turn to the front and back surfaces of the resin layers.

8. A piezoelectric type electric acoustic converter according to in Claim 6, wherein the second side electrode is arranged to turn to the front and back surfaces of the laminate, and the resin layers are provided with a first notch where a portion of the main surface electrode on the front and back surfaces are exposed, and a second notch where a portion of the second side electrodes turning to the front and back surfaces of the laminate are exposed.

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